

the



# Record

U. S. DEPARTMENT OF  
HEALTH, EDUCATION, AND WELFARE

July 13, 1976  
Vol. XXVII, No. 14

NATIONAL INSTITUTES OF HEALTH

## Dr. Pearce Bailey Dies; Eminent Neurologist Was 1st Director of NINCDS

Dr. Pearce Bailey, an internationally recognized leader in neurology and the first Director of the National Institute of Neurological and Communicative Disorders and Stroke, died June 23 in Washington, D.C., of cardiac arrest.

Born in New York City in 1902, Dr. Bailey's exceptional career in the medical sciences spanned nearly 4 decades, including 25 years of Government service.

As the first Director of the NINCDS (then known as the National Institute of Neurological Diseases and Blindness) in 1951, he established research programs in epilepsy, multiple sclerosis, neuromuscular diseases, eye and ear research, a collaborative perinatal project, and a program in surgical neurology.

While Director, Dr. Bailey was instrumental in making the field of neurology known nationally and internationally. He was a founder of the American Academy of Neurology, serving as its second president from 1951 to 1953, and a



Dr. Pearce Bailey

founder of the World Federation of Neurology in 1957.

Dr. Bailey's interest in neurology stemmed from his father, a physician, who in 1913 was president of the American Neurological

(Continued on Page 6)

## Dr. Sanford Heads NCI Cancer Biology Branch



The Branch Dr. Sanford heads supports extramural research in tumor biology and immunology.

Dr. Barbara H. Sanford has been appointed chief of the Cancer Biology Branch in NCI's Division of Cancer Research Resources and Centers.

The Branch, created in late March, administers a program of research grants to support basic research in tumor biology and tumor immunology as they relate to cancer cause, prevention, treatment, and diagnosis.

Dr. Sanford came to the National Cancer Institute in 1973 as a biologist in the Division of Cancer Biology and Diagnosis. This past April she joined the Division as program director for immunology, a position she will continue to hold.

### Education, Experience Noted

She received a B.S. degree in business administration from Boston University, and M.A. and Ph.D. degrees in biology from Brown University.

Prior to joining NCI, she was an assistant biologist at Massachusetts General Hospital, a research associate at Harvard Medical School, and associate professor of microbiology at the Harvard School of Public Health.

The author of 32 publications, Dr. Sanford is a member of numerous professional organizations including those concerned with immunology, genetics, and transplantation.

## Dr. Ferguson to Direct NIGMS's Biomedical Engineering Program

Dr. Frederick P. Ferguson has been named director of the Biomedical Engineering Program, National Institute of General Medical Sciences.

He previously served as acting director and deputy director of the Program.

Dr. Ferguson will administer a program of research and research training grants which fosters the introduction of principles and practices of engineering science into fundamental and applied biomedical research.

The program supports research in such areas as physiological systems analysis, biomaterials, biomechanics, prosthetics, computers as applied to biomedical problems, patient monitoring, instrumentation, ultrasound, diagnostic radiol-

(See DR. FERGUSON, Page 3)



Dr. Ferguson

## Young Volunteers Needed For New Flu Vaccine Test

A new test of flu vaccines in young people will be launched on Thursday, July 15, by the NIAID/BoB vaccine team which earlier carried out studies involving adults and members of high-risk groups.

The trial will begin at 9 a.m. in Bldg. 10, Cafeteria Conference Rooms. Particularly desired are summer employees, but any employee 24 years of age or younger will be welcome.

The NIAID/BoB scientists plan to evaluate the effectiveness of the new swine flu vaccines when given in two doses, several weeks apart. Earlier studies at NIH and elsewhere showed that a one-shot regimen was not adequate in children and young adults.

Authority for a modest payment to volunteers at the completion of their participation has been requested. Call Ext. 63144 for further information.

## 2nd Task Force Meets; Plans to Update Report On Environmental Health

During hearings on the 1976 budget, the House Appropriations Committee directed that a task force—the second appointed for planning in environmental health sciences—update and expand on developments since the first task force reported in 1969-70.

Such a special task force established by the National Institute of Environmental Health Sciences met at the University of North Carolina's School of Public Health on June 20-26.

In the opening session, Dr. Theodore Cooper, HEW Assistant Secretary for Health, told the 85-member task force—drawn from academic, industry, and Government settings—that the work they would do during the week could make a vital contribution to health policy and probably would affect this policy over the next 4 years.

Dr. Cooper also said that recommendations to HEW prior to the national budget sessions will be aimed at better programs in public health and preventive medicine.

Environmental health is "right in the middle" of the areas that need emphasis, Dr. Cooper noted. "We can't operate on hunches or luck. We realize we're playing hard ball. A lot of us are depending a great deal on what you do."

### Responsibilities Outlined

Dr. David P. Rall, NIEHS Director and a member of the task force executive committee, said the group would be responsible for developing a broad view of national needs in the environmental health sciences area without regard to what institution or agency might ultimately sponsor any proposed needed research.

During the week's work session, the task force drafted a report which surveys today's environmental health sciences scene and points to future research needs, including specialized manpower requirements and opportunities.

This draft followed a 4-month study begun shortly after the 1976 budget hearings.

Directing the work were task (See TASK FORCE, Page 5)



# the NIH Record

Published biweekly at Bethesda, Md., by the Editorial Operations Branch, Division of Public Information, for the information of employees of the National Institutes of Health, Department of Health, Education, and Welfare, and circulated by request to interested writers and to investigators in the field of biomedical and related research. The content is reprintable without permission. Pictures are available on request. The NIH Record reserves the right to make corrections, changes, or deletions in submitted copy in conformity with the policies of the paper and the Department of Health, Education, and Welfare.

NIH Record Office ..... Bldg. 31, Rm. 2B-03. Phone 49-62125

Editor ..... Frances W. Davis

Associate Editor ..... Fay Leviero

Associate Editor ..... Heather Banks

## Staff Correspondents

ADA, Judy Fouche; CC, Susan Gerhold; DCRT, Frances Sarles; DRG, Sue Meadows; DRR, Jerry Gordon; DRS, Arthur F. Moore; FIC, George Presson; NCI, Dr. Robert M. Hadsell; NEI, Inez E. Connor; NHLI, Bill Sanders; NIAID, Margaret McElwain; NIAMDD, Pat Gorman; NICHD, Doreen Mead; NIDR, Sue Hannon; NIEHS, Elizabeth Y. James; NIGMS, Wanda Wardell; NIMH, Betty Zubovic; NINCDS, Carolyn Holstein; NLM, Frann Patrick.

## Course on 'How to Apply For Job' Now Available

NIH employees may now "plug into" a course on "How to Apply for a Job."

The individualized course—consisting of a 25-minute cassette tape and an accompanying packet—contains information about vacancy announcements, the application process, the SF-171, and interviews.

These materials may be borrowed from Personnel and EEO Coordinator offices, and the Guidance and Counseling Branch, DPM, or they may be used at the Individual Learning Center, Bldg. 31, Room B2-B39.

This course was developed by the Division of Personnel Management specifically for NIH employees.



Richard Striker (r), administrative officer, Division of Intramural Research, NHLBI, congratulates Harold Mullinix, office services supervisor, DIR, NHLBI, who recently received a cash award for suggesting replacement of steel supports protruding from the ends of animal cages, eliminating a safety hazard.

## Fire Fighter's Switches Can 'Capture' Elevators In Case of Emergency

Firemen at NIH can now "capture" certain elevators in case of emergencies with the installation of fire fighter's switches.

When activated, the switches bypass elevator controls. A buzzer sounds, the elevator goes to its next floor, stops, and descends to the floor where firemen have activated the switch.

CC switches can be activated on floors 1 and B-1; Bldg. 30 on floor 1, and Bldg. 38 on the A level.

These switches are connected in Clinical Center elevators 9, 15, 17, 18; the Bldg. 30 freight elevator, and Bldg. 38 elevator 3.

Elevator passengers are cautioned to remain calm during emergencies, and to depart promptly when the door is opened.

## DRG Issues Conference Schedules and Summaries

The Division of Research Grants has compiled a schedule of planned conferences, symposia, workshops, or similar meetings held or supported to exchange information in areas of interest related to NIH programs.

Conferences are indexed in chronological and in alphabetical order. Pre-conference listings show the nature of the meetings and the arrangements, both tentative and completed.

Post-meeting listings give similar information, as well as a summary and information concerning subsequent publication.

The schedule does not give de-



Pfc. William C. Hanson brought the "good old days" back to NIH recently when he drove his 1915 Model-T Ford to the reservation. Officer Hanson, who has been with the NIH guard force since 1962, offered all a free ride in his four-cylinder antique auto, one of three he owns and operates.

## Several Agencies Join To Form Working Group On Training Physicians

Several Government agencies have joined together to form TOPPE, a working group on Training of Physicians in Patient Education.

Federal agencies represented in the group are the National Library of Medicine, the National Cancer Institute, the National High Blood Pressure Education Program of the National Heart, Lung, and Blood Institute, the Bureau of Health Education, and FDA's Bureau of Drugs.

### Focus on Family Practice

Because of the potential for inclusion of patient education in health care, the group has selected primary care practitioners in family practice as its initial focus.

As a result, TOPPE also has private sector representation: the Society of Teachers of Family Medicine and the American Academy of Family Physicians.

At present, NHBPEP is particularly concerned with two major TOPPE projects. The first is a patient education manual which will serve as a resource book for faculty members in family practice residency programs.

For the second project, the NHLBI Program will provide primary staff for development of a task force and workshop to define a performance-based set of skills and attitudes in patient education for family practice residents.

tailed information, but provides pertinent facts and indicates how further details may be obtained.

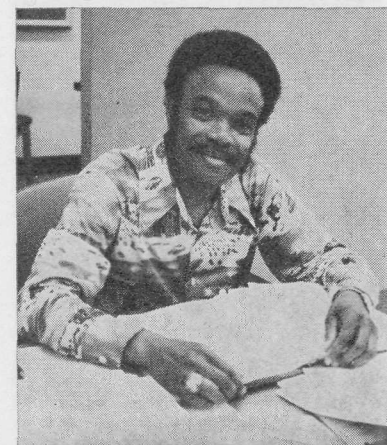
For copies of the schedule or for further information, contact the Research Analysis and Evaluation Branch, DRG, Ext. 67795.

## Film on Effects of Sun Presented for Employees

A 30-minute color movie, "Sun and Your Skin," which documents the effects of sunlight, is being presented next week by the Occupational Medical Service, formerly the Employee Health Service.

The film discusses protective mechanisms of the skin, the process of sunburn and tanning, why individuals respond differently to sunlight, and guidelines to tanning sensibly.

Differences in sunlight under varying weather conditions in various locations will also be discussed in the film which will be shown on Tuesday, July 20, at 11:30 a.m. and 12:30 p.m. in Bldg. 1, Wilson Hall; and on Wednesday, July 21, also at 11:30 a.m. and 12:30 p.m., in the Westwood Building Conference Room D.



Jasper L. Cummings, Division of Financial Management, ODA, has been appointed Equal Employment Opportunity counselor for the immediate office of the Director, the Office of Administration, and the Fogarty International Center.



## Dr. Saunders Discusses Hospice Concept, Care For the Terminally Ill

Dr. Cicely Saunders, founder and director of St. Christopher's Hospice in London, recently spoke at the Masur Auditorium on the care of patients dying of cancer and other diseases.

### Began Hospice in 1968

Dr. Saunders is a social worker, nurse, and physician. Eight years ago, she opened a facility for the care of the terminally ill, modeled after hospices or inns started by the Irish Sisters of Charity in the mid-19th century.

St. Christopher's Hospice has 70 beds, and the average stay is only 12 days. Through a home care program, nurses can extend hospice care to many more patients and their families, filling a void between acute hospital care to cure disease, and the home, where family members are sometimes unable or unavailable to care for the chronic condition of a dying relative.

### Nurses, Visitors Give Support

The hospice nursing staff is available to spend time with the patient and family in pleasant, home-like surroundings. Visitors, including children, are welcome. Patients are encouraged to bring their favorite possessions.

Staff support may minister to the patient's physical needs—encouraging his appetite, or treating nausea or an infection.

Sometimes the patient just needs someone to talk to. The nursing staff is so capable in dealing with the psychological aspects of death and dying that a psychiatrist is needed only as a consultant.

Dr. Saunders' chief contribution to the hospice concept is her research on the alleviation of continuing pain in the dying by the use of narcotics. She has formulated an analgesic mixture composed chiefly of diamorphine, cocaine, and an antiemetic which is given orally on a regular 4-hour schedule.

### Studies Pain, Medication

She is firmly opposed to the administration of pain medication at the request of the patient. Anticipation of pain when the medication wears off only adds to the patient's anxiety and suffering, she said. When the medication is finally given, the effective dose is so high that the patient is "drugged" to sleep.

Addiction—taking a drug to experience its psychological effects—does not occur in the hospice setting, Dr. Saunders found. Less than half of terminal cancer patients have continuing pain severe

## DR. FERGUSON

(Continued from Page 1)

ogy, and automation of the clinical laboratory.

Dr. Ferguson joined NIGMS in 1960 as chief of the Research Fellowships Section, Research Training Grants Branch. In 1963, he was named chief of the Institute's Research Fellowships Branch, and in 1973, deputy director of the Biomedical Engineering Program.

Dr. Ferguson received B.A. and M.A. degrees from Wesleyan University and the Ph.D. degree in zoology and biochemistry from the University of Minnesota, where he received the Charles P. Sigerfoos Fellowship, 1941-42.

### Career Detailed

From 1943 to 1945, he was an instructor in physiology at Louisiana State University School of Medicine, teaching medical students enrolled in Army and Navy medical training programs; and in 1945 joined the Bureau of Biological Research at Rutgers University, becoming assistant professor of physiology in 1946.

Returning to Wesleyan University, Dr. Ferguson was assistant professor of biology from 1947 to 1949. He then joined the faculty at the University of Maryland School of Medicine, and became acting head of the department of physiology, 1959-60.

### Research Interests Noted

Dr. Ferguson is a consultant to FASEB's Life Sciences Research Office and a Fellow of the American Association for the Advancement of Sciences and the New York Academy of Sciences.

He has published papers on renal physiology, electrocardiography, protein metabolism, and the effects of hypoxia on blood electrolytes and renal function.

enough that narcotics become appropriate therapy. When pain is controlled, the patient is often able to leave the hospice and lead a "normal" life for a period of time.

With slides, Dr. Saunders took the audience on rounds through St. Christopher's. Entering patients showed the fear, anxiety, and suffering common to a terminal illness. After proper medication, the same patients appeared relaxed and alert. Children of staff played in the garden and intermingled with the patients, some of whom still celebrated birthdays.

### NCI Funds Similar Facility

The lecture was arranged by Lawrence D. Burke, program director for Rehabilitation in the National Cancer Institute's Division of Cancer Control and Rehabilitation, which funds a hospice facility in New Haven, Conn.

## Suburban Md. Chapter of FEW Honors Outstanding Contributors to Promoting Equality for Women



Susan Feinman, president of the Suburban Maryland Chapter of FEW (seated) poses with awardees honored at the Chapter's annual dinner: Dr. McNabola (also seated) and (standing l to r) Ms. Rice, Dr. Hinman, Ms. Kutzke, Ms. Lloyd, and Dr. Brown.

The Suburban Maryland Chapter of Federally Employed Women, Inc. honored outstanding contributors to promotion of equal opportunities for women at its annual awards dinner at the Naval Medical Officers Club on June 23.

Guest speaker Dorothy P. Rice, Director of the National Center for Health Statistics, talked about the Role of Women in the Federal Bureaucracy.

The Chapter's highest honor, the Distinguished Service Award to the Montgomery County Maryland

Commission for Women, was accepted by Dr. Quincalee Brown, Commission Director.

The Commission received the award for establishing "A Woman's Place," an organization which provides employment counseling, professional referral and protective services, and information to assist women.

Dr. Edward J. Hinman, Director of the Division of Hospitals and Clinics, Bureau of Medical Services, PHS, received the Chapter's Outstanding Achievement Award.

Through Dr. Hinman's efforts, PHS hospitals now employ women in jobs never before open to them during the 175-year history of the hospitals.

A Special Recognition Award was presented to Betty Kutzke for her dedication and leadership in establishing the National Center for Prevention and Control of Rape at NIMH.

### Members Honored

Two Chapter members, Karyn Lloyd and Dr. Marie McNabola, were also honored. Ms. Lloyd received an Outstanding Performance Award, Dr. McNabola, special recognition for her outstanding leadership to the Chapter and the National FEW organization as the first FEW regional coordinator for the D.C. metropolitan area.

New chapter officers were introduced at the dinner: president, Alice Hesse; first vice president for Programs, Sam Bell; second vice president for Membership, Karyn Lloyd; treasurer, Evelyn Surles; recording secretary, Eileen Bradbury, and corresponding secretary, Darrell Galpin.

Patricia Collins, Susan Feinman, and Dr. McNabola are board members.



The bicycle racks throughout NIH are convenient for the many employees riding their bikes to work either to enjoy the pleasant summer weather or to conserve fuel.

All bike riders are again cautioned to secure their bikes with the case-hardened chains provided and a quality lock to prevent theft. Do not use lightweight chains or cables, or a cheap lock, as they can be easily cut by bicycle thieves.

It only takes a few seconds longer to secure a bike properly. The Security Management Branch, DAS, says: DON'T LET YOUR BIKE BE THE NEXT TO GO!



## Dr. Grant L. Rasmussen Receives Beltone Award For Hearing Research

Dr. Grant L. Rasmussen, whose pioneering work on the auditory system at the National Institute of Neurological and Communicative Disorders and Stroke provided the foundation for modern-day research in this field, recently received the 11th annual Beltone Institute Award for Hearing Research.

The award, an inscribed plaque and an honorarium of \$1,000, is presented each year to an individual making superior contributions



The inscribed plaque is presented to Dr. Rasmussen (l) by Dr. Juergen Tondedorf, College of Physicians and Surgeons, Columbia University, and a Beltone Institute trustee.

to the entire field of hearing.

Dr. Rasmussen is especially noted for his discovery and description of a nerve tract, called Rasmussen's bundle, which regulates the sensitivity of the inner ear.

During his tenure at NINCDS, from 1954 to his retirement in 1966, he headed the Functional Neuroanatomy Section of the Laboratory of Neuroanatomical Sciences.

### **Accomplishments Noted**

The citation on the plaque states, in part, that "... throughout his entire professional life, Grant Rasmussen has truly impressed his mark on this field of scientific research.

"The recent explosion of interest in sensory coding at the cochlear nucleus ... is due in no small part to Dr. Rasmussen's careful anatomical observations, including unpublished results which he has unselfishly shared."

Prior to Dr. Rasmussen's discovery, the only known neural connections linking the hearing mechanism with the brain involved afferent nerves—nerves which carry impulses from the ear to the brain.

Dr. Rasmussen found that a "feedback" mechanism also was operating in which efferent nerve fibers carry messages from the brain to the ear.

He mapped in great detail the

## NIH Visiting Scientists Program Participants

6/20—Dr. Hiroshi Araki, Japan, Pediatrics Metabolism Branch. Sponsor: Dr. Paul A. di Sant'Agnes, NIAMDD, Bg. 10, Rm. 8N250.

6/20—Dr. David Ben Ezra, Israel, Clinical Branch. Sponsor: Dr. Carl Kupfer, NEI, Bg. 31, Rm. 6A03.

6/20—Dr. Luis M. de la Maza, Spain, Laboratory of Experimental Pathology. Sponsor: Dr. Robert M. Friedman, NIAMDD, Bg. 4, Rm. 309.

6/20—Dr. Arthur M. Geller, United States, Laboratory of Nutrition and Endocrinology. Sponsor: Dr. Martin Rodbell, NIAMDD, Bg. 6, Rm. B126.

6/20—Dr. Ingeborg Liebaers, Belgium, Arthritis and Rheumatism Branch. Sponsor: Dr. Elizabeth Neufeld, NIAMDD, Bg. 10, Rm. 9N238.

6/20—Dr. Jayasree Nath, India, Laboratory of Cell Biology. Sponsor: Dr. Martin Flavin, NHLBI, Bg. 3, Rm. 125.

### **Two Israelis Visit**

6/20—Dr. Ariella O. Oppenheim, Israel, Laboratory of Molecular Biology. Sponsor: Dr. R. G. Martin, NIAMDD, Bg. 2, Rm. 208.

6/21—Dr. Menachem Hanani, Israel, Laboratory of Neurophysiology. Sponsor: Dr. Arnoldo Laksansky, NINCDS, Bg. 36, Rm. 2C02.

6/21—Dr. Takashi Matsui, Japan, Laboratory of Biochemical Genetics. Sponsor: Dr. Alan Peterkofsky, NHLBI, Bg. 36, Rm. 4C09.

6/21—Dr. Peter Stanley Nawrot, Poland, Environmental Toxicology Branch. Sponsor: Dr. Robert E. Staples, NIEHS, Research Triangle Park, N.C.

6/21—Dr. Peter V. Pallai, Hungary, Section on Molecular Structure. Sponsor: Dr. Erhard Gross, NICHD, Auburn Bg., Rm. 7.

6/24—Dr. Miroslaw M. Szutowski, Poland, Laboratory of Pharmacology. Sponsor: Dr. R. M. Philpot, NIEHS, Research Triangle Park, N.C.

6/29—Dr. Pangala Venkatraj Bhat, India, Dermatology Branch. Sponsor: Dr. Gary L. Peck, NCI, Bg. 10, Rm. 12N252.

6/30—Dr. Fujiko Liao Huang, China, Experimental Pathology Section. Sponsor: Dr. Toichiro

interconnections among the several levels of the auditory system.

The Beltone Institute for Hearing Research is a non-profit organization which supports a variety of activities judged to be beneficial to auditory research.

Its most important activities include publication of its TRANSLATION series, in which monographs on hearing research from foreign sources are translated into English.

## Fetal Liver Cells Can Help Correct Severe Combined Immunodeficiency Disease

Two groups of researchers, supported by grants from the National Institute of Allergy and Infectious Diseases, have successfully corrected severe combined immunodeficiency disease (SCID) with injections of unrelated fetal liver cells.

Although bone marrow transplantation remains the treatment of choice for infants with this rare disease, inherited fatal disorder, these results offer hope for those many patients without histocompatible donors and for patients with other disorders, such as aplastic anemia.

### **Reconstitution Succeeds**

Both groups of investigators treated their patients with intraperitoneal injections of fresh liver cells from very young human fetuses, resulting in successful reconstitution of both T cells and B cells, the two types of lymphocytes involved in the immune response.

Fetal liver, before 12 weeks, is a source of healthy stem cells that can produce lymphocytes without the fully developed ability to recognize foreigners and cause graft rejection.

Drs. Richard G. Keightley, Alexander R. Lawton, Max D. Cooper, and Edmond J. Yunis, of the University of Alabama Medical Center in Birmingham, and the University of Minnesota in Minneapolis, reported their results in *Lancet*, Nov. 1, 1975.

### **Treated for 1 Year**

They treated a 3-month-old boy who had SCID associated with a deficiency of adenosine deaminase (ADA), an enzyme that may be related to the development of normal immunologic function. Immunocompetent T and B cells developed, and the child remained free from infection for 1 year.

Later, however, he developed an ultimately fatal nephrotic syndrome.

Drs. Rebecca H. Buckley, John K. Whisnant, Richard I. Schiff,

Kuwabara, NEI, Bg. 6, Rm. 211.

7/1—Dr. Renato Covacci, Italy, Laboratory of Applied Studies. Sponsor: Dr. Eugene K. Harris, Bg. 12A, Rm. 2041.

7/1—Dr. Yoshiko Nakamura, Japan, Laboratory of Pathology. Sponsor: Dr. Jose Costa, NCI, Bg. 10, Rm. 2N102.

7/1—Dr. Amos Oppenheim, Israel, Laboratory of Molecular Biology. Sponsor: Dr. Sankar Adhya, NCI, Bg. 37, Rm. 4B10.

7/1—Dr. Mangala Pandya, India, Dermatology Branch. Sponsor: Dr. Marvin A. Lutzner, NCI, Bg. 10, Rm. 12N238.

7/6—Dr. Anil Mukherjee, India, Neonatal and Pediatric Medical Branch. Sponsor: Dr. Joseph D. Schulman, NICHD, Bg. 10, Rm. 13N256.

Richard B. Gilbertsen, Andrew T. Huang, and Marvin S. Platt of Duke University School of Medicine, Durham, N.C., and Children's Hospital of Akron, O., published their research results in the May 13 issue of *The New England Journal of Medicine*.

They treated two unrelated infant boys who had SCID not associated with ADA deficiency. One infant is healthy and developing normally 19 months after the operation, although he did apparently have transient graft-versus-host disease about 3 months after the liver cell transplantation.

### **Complexity Emphasized**

The other infant died of severe chronic lung disease 10 months after treatment, even though some immunologic reconstitution did occur. The differing results of these two transplants emphasizes that SCID is a complex and heterogeneous syndrome with unrecognized factors that may inhibit immunologic development.

Previous reports have described unsuccessful treatments with fetal thymus, which did not correct the B cell defect. Thus, fetal liver transplants, which can correct both B cell and T cell deficiencies, offer a chance of success even when a histocompatible bone marrow donor is unavailable.



Dorothy West (l) enjoys a poem about her 20-year NCI career by Betty Avedikian. More than 60 friends and co-workers turned out at a recent party to wish Mrs. West a happy retirement and present several gifts. At the time of her retirement, she was in the Office of Cancer Communications. While there, she updated the office library and files for incorporation into the Institute's present computerized information retrieval system.





Dr. Margaret K. Deringer Barrett, a biologist in NCI's Division of Cancer Cause and Prevention, recently received an honorary D.Sc. degree from Hood College. During more than 30 years of research, Dr. Barrett—who supervises the Registry of Experimental Cancers—has had several firsts. She was the first at NIH to transfer fertilized ova from a female mouse of one strain to the uterus of a mouse of another strain; to demonstrate that sex is a factor in susceptibility to the toxic effects of chloroform, and to recognize hepatoblastoma, a liver cancer, in mice.

## TASK FORCE

(Continued from Page 1)

force co-chairmen Dr. Norton Nelson, chairman and director of the Institute of Environmental Medicine at New York University Medical Center, and Dr. James Whittemberger, professor in the department of physiology, Harvard University School of Public Health.

On June 26, following the week-long work session, sub-task force chairmen gathered to brief other task force members, NIEHS personnel, interested observers, and members of the news media and to solicit suggestions for revisions.

### Introduction Quoted

Congressman David Obey of the Subcommittee on Labor, Health, Education, and Welfare of the House Committee on Appropriations opened the briefing session.

He said that those of "you in public health and biomedical research must develop new means for preventing or attacking the very real health problems resulting from our increasingly complex man-made society. . . . Over the long run the solution to these problems must rest on a bedrock of soundly designed fundamental biomedical research.

"This research must be based upon clearly identified problems which are ready for exploitation."

Dr. Nelson said that essentially all of the recommendations coming out of the task force deliberations will fall within the objective of

## Fluoride Excretion and Retention Depends On pH, Georgia NIDR Grantees Report

Scientists supported by the National Institute of Dental Research have found that the ability of fluoride to cross a biological membrane is dependent on the difference in pH across that membrane. The finding may improve treatment of fluoride toxicity from any source—e.g., prolonged use of methoxyflurane anesthesia or industrial exposure—or may help maximize fluoride retention for fighting tooth decay.

Dr. Gary M. Whitford and associates at the Medical College of Georgia in Augusta found that when urine in rats is basic (pH of 7 or higher) 60 to 80 percent of the fluoride which enters the kidney per unit time is excreted.

On the other hand, when urine drops into the acid range (below pH 6), less than 10 percent of the fluoride is excreted; that is, more than 90 percent is reabsorbed from the kidney and returned to the systemic circulation.

The work suggests that urinary (renal tubular) pH is the major factor regulating the renal clearance of fluoride. Therefore, it may prove helpful to treat fluoride toxicity by alkalizing the urine, for example, by administering  $\text{NaHCO}_3$  or acetazolamide.

These measures may be useful in the event that toxic overdoses occur with methoxyflurane anesthesia, industrial exposure, or if a young child swallows an excess of fluoride tablets. Further study is planned to determine to what extent adjustment of urinary pH can minimize the toxicity associated with excessive fluoride intake.

These new findings may also lead to enhanced clinical benefits of fluoride. Because an acid urine increases reabsorption by the kidney

disease prevention.

They will cover a wide array of strategies, he explained, ranging from better understanding of the intracellular mode of action of toxic agents to the global movement of pollutants.

The research proposed, he added, will require the participation of a wide range of talents located in a variety of institutions from the scientific and academic community and from many governmental agencies. Dr. Nelson stressed that of all these agencies, regulatory and nonregulatory, NIEHS clearly fills a critical, central role.

Following revision of the preliminary report, entitled *Second NIEHS Task Force for Research Planning in Environmental Health Science*, the final task force report will be presented to Congress in January 1977, and then published for widespread distribution.

It will update the first task force report, *Man's Health and the Environment—Some Research Needs* which has been the only thorough review of this broad area of research.

Both task forces were directed by NIEHS's National Ad-

tubules and, presumably, retention in bones and teeth, fluoride supplements prescribed to reduce tooth decay might best be given at night when urine pH is low. The investigators examined the renal clearance of fluoride in anesthetized rats infused with fluoride-containing solutions.

### Assumptions Disproved

Careful measurements of urinary pH and other parameters showed that fluoride clearance is poorly correlated with chloride clearance and urine flow rate, both previously thought to be major determinants of fluoride clearance. A strong correlation was noted with urine pH.

The experiments are described in the February 1976 *American Journal of Physiology* by Dr. Whitford, Dr. David H. Pashley, and Gail I. Stringer. Dr. Whitford initially presented the findings on the role of pH on the renal clearance of fluoride at the American Association for Dental Research meeting in New York City, April 1975.

Subsequently, Drs. Whitford and Pashley reported to the International Association for Dental Research meeting in Miami Beach, Fla., March 25-28, 1976, that pH also controls fluoride transport across the less permeable epithelium of the rat urinary bladder.

visory Environmental Health Sciences Council.

### Report Will Relate to 13 Areas:

- General atmospheric pollutants
- Occupational exposures
- Food, water, and multiple sources
- Special environments: community, home, others
- Selected environmental factors: biologic, physical
- Transport and alteration of pollutants, waste disposal, and natural sources of toxicants
- Environmental measurements for assessment of human exposure
- Environmental forecasting and technology anticipation
- Biological mechanisms and determinants of toxicity
- Selected modes of injury: cancer, mutations, birth defects, reproduction, behavioral effects
- Response of organ systems to exposure to environmental agents
- Human studies: clinical epidemiology, dose-response, extrapolation to man
- Professional and scientific education and personnel

## Kidney Dialysis Costs Less at Patient's Home, Recent Study Indicates

Treatment cost for victims of chronic kidney disease who require periodic blood cleansing, or dialysis, are almost four times as high in the hospital as in the patient's home, according to an NIH-sponsored study of dialysis costs.

The study, conducted at five major U.S. dialysis centers, said home dialysis treatments average about \$43 each while the average hospital session costs about \$159.

With three dialysis sessions a week, the yearly cost for home treatments would be about \$7,000. Hospital dialysis would cost some \$24,700 annually.

### Study Not for Averages

Reporting their study result in the journal, *Kidney International*, Paul A. Hoffstein, University of Texas Medical School, and Dr. Keatha K. Krueger and Dr. Robert J. Wineman, National Institute of Arthritis, Metabolism, and Digestive Diseases, emphasized the study was not designed to provide a statistical average of dialysis costs.

Rather, the data are representative of the costs of a variety of dialysis modalities at several locations. From this, weekly, monthly, and annual dialysis treatment costs can be found for any particular modality.

The authors also pointed out that the dialysis costs reported are July-November 1973 rates—the period that the study was conducted. The costs include personnel, supplies, travel, equipment, and incidental expenses, but do not include physician services, radiology, and blood access surgery.

The study found the home dialysis program had decidedly the lowest cost. At home, the well-trained patient essentially treats himself, although he may require some assistance from a family member.

The next most economical program is "limited care," with an average cost of \$106, in which the patient is treated by nurses or technicians in a special dialysis treatment center.

### Training Adds Expense

Third is in-hospital dialysis. Finally, at approximately \$190, the most expensive dialysis includes several weeks of home training in addition to treatments.

Dr. Wineman is associate chief of the Artificial Kidney-Chronic Uremia Program of NIAMDD. Dr. Krueger, who was formerly associated with the same program, is now Diabetes Program director.

Mr. Hoffstein is president of the Nephrology Cost Group, which monitored the study, maintained uniformity, and analyzed results.



## More Women Than Ever Get Ulcers! Increasing Female Trend Cause Elusive

American women are steadily seizing the long-time badge of success for businessmen: the ulcer.

"This is one instance in which equal rights for women are becoming a reality," says Dr. Morton I. Grossman, director of UCLA's Center for Ulcer Research and Education in California.

The UCLA Center is supported by the National Institute of Arthritis, Metabolism, and Digestive Diseases.

Over the past 30 years, the male-female ulcer ratio in this country has dropped from 20 to 1 to 2 to 1, according to hospital and clinic records. One in 10 Americans will have ulcers at some time in their lives, says Dr. Grossman, one of the world's top ulcer specialists.

### Specialists Attend Conference

He reported his findings during the Digestive Disease Week conference in Miami Beach. Some 3,000 gastrointestinal specialists, many of whom are conducting NIH-funded research, attended the meetings.

Experts cannot fully explain the feminine ulcer trend—which they say is worldwide—but trace part of the problem to increased smoking and drinking among women.

"Smoking, as well as the social use of alcohol, has risen terrifically in women," says Dr. Charles F. Code, a former Mayo Clinic ulcer specialist who is now assistant director of the UCLA Center.

Both substances upset the gastric system by irritating the delicate mucous membranes, he says.

### Stress Factor Questioned

Since no one has ever scientifically connected either occupational or emotional stress to ulcers in men, the researchers stop short of attributing the current rise in female gastric disease to increased job responsibility.

"It's a very popular notion that psychological and environmental factors contribute to ulcers, but it's never been proven," Dr. Grossman says. "For some people, stress on the job actually seems to inhibit ulcers."

The UCLA center is currently studying airport controllers. "You'd think that would be one of the most stressful jobs around—but so far we've found no link to ulcers," Dr. Grossman says.

The female ulcer trend—accom-

panied by a 30 percent to 50 percent drop in male ulcers in the past 20 years—also seems to disprove the long-held theory that women's hormones protect them against ulcer formation, Dr. Code says.

While the causes are elusive, the first effective ulcer preventive drug may be in the offing, according to scientists.

Researchers are getting "promising" results with a histamine drug that apparently "turns off the acid tap" of acid-producing cells.

Ulcers—penny-sized breaks in the lining of the stomach or intestine—are caused by excess acid. Cigarettes, alcohol, caffeine, and aspirin are known to lead to ulcers by stimulating acid secretion or damaging membranes.

### New Drug Effective

The new drug, called "Histamine H<sub>2</sub> Blocker," cuts off acid-producing sites on individual gastric cells, according to Dr. Code. He predicts that widespread prevention and early cure of ulcers could become a reality "within 15 to 20 years."

Meanwhile, as doctors continue to watch women catch up with men in the ulcer race, Dr. Code said he is not sure what social significance, if any, the trend involves. "Almost any disease will change a person in a certain way, but we haven't found any pattern with ulcer patients," he said.

### U.S. Death Rate Still Declining

The death rate in the U.S. is declining, setting new records on its way down, the National Center for Health Statistics reports.

The first record-breaking low—9.2 deaths per 1,000 population—occurred in 1974. Since then, the rate dropped 2 percent in 1975 to 9.0 deaths per 1,000, and dropped another 8 percent in January 1976 from the January 1975 figure.

### Three Causes Cited

These drops reflect "a continuing downturn" in three causes of death—heart disease, cerebrovascular disease, and accidents.

In 1974, for example, the death rate from the Nation's largest killer—heart disease—fell 4.8 percent, and another 2.5 percent in 1975.

Microscopes and telescopes, properly considered, put our human eyes out of their natural, healthy, and profitable point of view.—Goethe.

## DR. BAILEY, FIRST NINCDS DIRECTOR, DIES



At his retirement party Dr. Bailey (c) chatted with the two Neurology Institute Directors who followed him. Dr. Richard L. Masland (r) served from 1959 to 1968, and Dr. Edward P. MacNichol, Jr., was the third Director until 1974.

(Continued from Page 1)

Association and one of the founders of the Neurological Institute at Columbia University.

He received his A.B. from Princeton University in 1924; an M.A. degree in psychology from Columbia University in 1931; and a Ph.D. 2 years later from the University of Paris (Sorbonne).

During his postgraduate work, he consulted and studied with leading European psychiatrists, including Freud, Jung, Adler, and Otto Rank. Later he helped Dr. Rank organize the Psychological Center in Paris.

### Studied Nervous System

Dr. Bailey's psychological studies with the nervous system further encouraged his interest in medicine. In 1941 he graduated from the Medical College of South Carolina and was certified by the American Board of Psychiatry and Neurology in 1947.

He served as chief resident physician of Bellevue Hospital's Neurologic Service, New York, 1942-44; was appointed Commander, MC, USNR, and served as chief, Neurologic Service, Philadelphia Naval Hospital, 1944-46.

Based on his accomplishments there, Dr. Bailey was asked to organize a Section of Neurology in the Veterans Administration's Central Office in D.C. That Section eventually became the largest neurological service in the world.

While working at the VA, Dr. Bailey became an attending neurologist at D.C. General and Georgetown Hospitals, and professor of clinical neurology at Georgetown.

### Left VA for NIH

He left the VA in 1951 to become Director of the newly established Neurology Institute at NIH, a position he held for 8 years.

In 1959 he went to Antwerp, Belgium, to be Director of the Institute's International Neurological Research Program, where he coordinated its programs with those of the World Federation of Neu-

rology, the organization he had jointly founded 2 years earlier.

Three years later Dr. Bailey became special assistant to the Director of the NINCDS as chief of the Institute's Inter-American Activities, with offices in San Juan, P.R. There he worked with the University of Puerto Rico and coordinated neurological programs in Latin America. He retired in 1971.

Dr. Bailey was a member of many professional societies and has served as an officer or board member of several. He also was on the medical advisory boards of a number of voluntary health agencies.

In addition, he was on the editorial board of the journal *Neurology*, editor of the Newsletter of the American Academy of Neurology, and on the editorial board of the *Journal of the Neurological Sciences*.

### Received Many Honors

Dr. Bailey received many honors and awards. He was decorated by the French Government and was an honorary member of medical societies in Argentina, Brazil, Peru, Uruguay, France, Germany, Greece, and Japan.

Several months ago, the Epilepsy Foundation of America established the Pearce Bailey Award (a medal and a \$500 honorarium) to be given annually for "exceptional dedicated service in the field of epilepsy." Dr. Bailey was the first recipient.

Dr. Bailey, the author of many papers in the neurological sciences, was particularly interested in the rehabilitation of neurology patients, in the state-of-the-art of neurology, and in famous neurologists. He wrote several biographies and translated from the French Georges Guillain's biography of J. M. Charcot, the father of modern neurology.

He is survived by his wife, Dora, of Washington, D.C.; two nephews, Nolen B. Bailey of New York and James L. Bailey of New Jersey; and two nieces, Edith B. Kelly of New York and Prudence T. Palmer of Connecticut.

### Call for Cancer Answers

Skin cancer and its warning signals will be the subject through Sept. 1 on Cancer Answers, the recorded telephone information service provided by the American Cancer Society for metropolitan area residents.

To learn the signs of early skin cancer and who is most susceptible, call 462-7000.



## Echocardiographs Identify Heart Damage In Alcoholics, Risks From Excessive Iron

Early, often asymptomatic, alterations in heart structure and function that may gradually progress to congestive heart failure in chronic alcoholics may be detected by echocardiography, according to recent clinical studies at the National Heart, Lung, and Blood Institute and elsewhere.

This safe, sensitive, non-invasive technique is equally effective in detecting and monitoring the cardiac deterioration that may occur with gradual deposition of excess iron in the heart tissues of patients with hemochromatosis—a disorder of iron metabolism—or Cooley's anemia victims who require repeated transfusions to prevent red blood cell depletion.

The scientists used echocardiography to examine the cardiac effects of chronic alcoholism in 38 patients—26 without overt cardiac symptoms and 12 with clinical symptoms of alcohol-induced left ventricular failure.

None had hypertension or clinical evidence of coronary or rheumatic heart disease. All had abstained from alcohol for at least 2 weeks before testing.

### Dilated Chambers Pump Less

All 12 patients with symptoms had considerably dilated left ventricles—usually with thickened walls—that were contracting poorly. With each heart beat, the dilated chambers pumped less than half the blood they had contained at the end of their filling phase.

The percentage of blood pumped in relation to the total amount present at the beginning of ventricular contraction is called the ejection fraction and ranges from 65 to 80 percent in normal, healthy hearts.

Of the 26 patients without clinical symptoms, only 2 had dilated left ventricles, but 21 of the 26 exhibited some thickening of the left ventricular wall, and 9 had reduced ejection fractions, though the reductions were less substantial than in patients with symptoms.

Heart failure may also be a disabling or fatal complication of Cooley's anemia and other non-hemorrhagic blood disorders requiring repeated blood transfusions to maintain adequate blood levels of functional red cells.

### Excess Iron Accumulates

Premature destruction of flawed red cells and the abbreviated life span of transfused red cells may give rise to excessive quantities of iron-containing substances that the body is unable to excrete.

The excess iron, some biologically active, accumulates in various tissues and organs, with varied but usually harmful results.

The scientists studied 50 such patients—2 with hemochromatosis, and 48 with severe Cooley's anemia or related congenital anemias.

### NHLI Name Change Now Official; Activities Expand

With the implementation of recently enacted legislation, the name of the National Heart and Lung Institute was officially changed on June 25 to the National Heart, Lung, and Blood Institute.

The name of its principal advisory body has also been changed to the National Heart, Lung, and Blood Advisory Council.

For more details, see the *NIH Record*, June 2, 1976.

Forty had experienced no symptoms of congestive heart failure, 5 had experienced mild or transient symptoms, and 4 had severe congestive failure at entry into the study.

Echocardiography showed that all patients, symptomatic or asymptomatic, had some thickening of the left ventricular wall, and all but 3 exhibited left ventricular enlargement.

In those patients with no overt symptoms of congestive failure or only very mild ones, LV ejection fraction closely approached the normal range or fell within it. In the 4 with overt congestive failure, the ejection fraction was 55 percent or less.

### Can Detect Overload

Among the 46 patients with normal or near-normal ejection fractions at entry, only 1 died during the next 15 months. All 4 patients with ejection fractions less than 55 percent died within 6 months.

The scientists conclude that cardiac abnormalities resulting from iron overload can be detected by echocardiography before clinical symptoms appear and well before overt heart failure develops.

Although little can be done at present to reduce the iron overload that may bring on cardiac problems, the search continues for effective iron chelating agents to convert excessive iron compounds into forms more readily excreted by the kidneys.

These studies were reported by Drs. W. L. Henry and S. E. Epstein of the NHLI Cardiology Branch; Dr. A. W. Nienhuis of the NHLBI Molecular Hematology Branch; Dr. V. C. Canale of Cornell Medical Center; Dr. M. Weiner of NYU Hospital; Drs. E. C. Mathews, Jr., A. A. Del Negro, R. D. Fletcher, and J. A. Snow of the Washington, D.C. VA Hospital during the National Meeting of the American Federation for Clinical Research at Atlantic City in May.

## Dr. Ronald Hunt Named Director of New England Primate Research Center

Dr. Ronald D. Hunt has been appointed director of the New England Primate Research Center, one of the seven major nonhuman primate research centers in the U.S. supported by the Division of Research Resources.

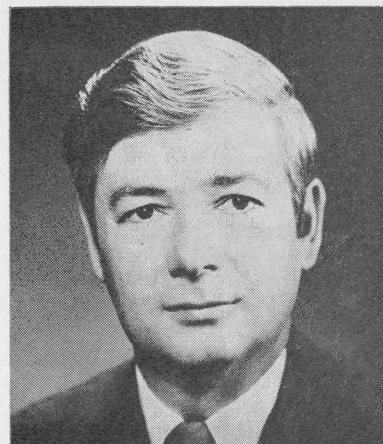
He succeeds Dr. Bernard F. Trum, the original director of the Center, who has retired.

### Research Interests Described

A Diplomate of the American College of Veterinary Pathologists, Dr. Hunt received his D.V.M. from the University of California, Davis. His research has been directed toward herpes virus infections and metabolic bone diseases in primates.

Three times he has received the American Association for Laboratory Science Research Award for the most outstanding paper published in *Laboratory Animal Care*.

With his colleagues at the New England Primate Research Center, Dr. Hunt reported in his 1967



A member of the subcommittee on laboratory animal nutrient requirements for the National Research Council, National Academy of Sciences, Dr. Hunt is also the co-author of "Veterinary Pathology," a text now in its fourth printing.

award-winning paper that the injection of a virus originating in squirrel monkeys into other species, such as marmosets and owl monkeys, would produce cancer.

Dr. Hunt and his co-workers also received the award for work on oncogenic viruses in 1969, and on filariasis in 1973.

### Career Noted

In 1958 Dr. Hunt joined the U.S. Army Veterinary Corps at the Armed Forces Institute of Pathology. Later he was commissioned as captain and reassigned as assistant chief of the Pathology Division in the U.S. Army Research and Nutrition Laboratory in Denver, Colo.

In 1963, when the New England

## Journals Publish Recent National Caries Program Symposia Proceedings

Proceedings of two National Caries Program symposia on immunologic aspects of dental caries have been published recently.

*Immunology Abstracts* issued a supplement to present the proceedings of a National Institute of Dental Research symposium held at NIH in January.

Leading researchers discussed the selection of immunogens for a caries vaccine and the cross reactivity of antisera to oral microorganisms with mammalian tissues.

Edited by Drs. W. H. Bowen and T. C. O'Brien, NIDR, and Dr. R. J. Genco of the State University of New York at Buffalo, the publication assesses the application of existing knowledge of bacterial vaccines to the development of a vaccine against dental caries.

### Issue Contains 29 Papers

Proceedings of a second NCP symposium, *Immunological Aspects of Dental Caries*, were published in a special issue of the *Journal of Dental Research*. The issue contains 29 papers on dental caries microbiology, antigens of cariogenic microorganisms, induction of salivary antibody, and caries vaccination experiments in rodents and primate model systems.

### Dr. Scherp Honored

The symposium was dedicated to the late Dr. Henry W. Scherp, first NIDR associate director for the National Caries Program.

A limited number of each publication is available from Dr. T. C. O'Brien, Westwood Bldg., Room 522, Ext. 67884.

Primate Research Center was established, he became a research fellow in pathology there. He is currently chairman of the Center's comparative pathology department, serves as associate director of the Animal Research Center of the Harvard Medical School, and holds a joint faculty position as associate professor of pathology, Harvard University.

He has been associate editor of *Laboratory Animal Care*, a lecturer in nutritional pathology at MIT, and an affiliate pathologist at the Angell Memorial Animal Hospital.

## ENERGY TIPS

- Proper insulation can increase temperature control efficiency by as much as 20 to 30 percent.

- As much as possible, use cooking and heat-generating equipment—such as dishwashers, clothes washers, and dryers—in the early morning and late evening hours.



## New Editor, Title, Focus For Cancer Periodical

Dr. Bruce A. Chabner has recently been appointed editor-in-chief of the journal *Cancer Treatment Reports* for a 4-year term beginning July 1.

Dr. Chabner, now assistant chief of the National Cancer Institute's Laboratory of Chemical Pharmacology and head of the laboratory's Biochemical Pharmacology Section, was a clinical associate at NCI from 1967 to 1969.

*Cancer Treatment Reports*—previously *Cancer Chemotherapy Reports*—was begun in 1959 to report progress in the new field of chemotherapy. It has since become a primary journal for research in the field of clinical and experimental chemotherapy.

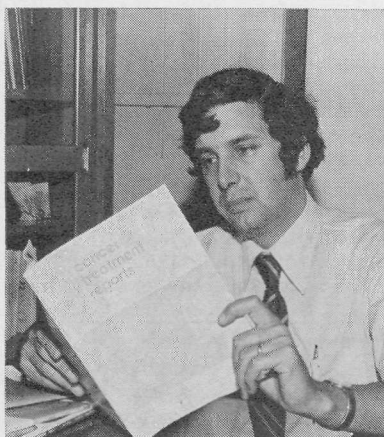
### Content Expanded

The name was changed this January to emphasize expansion of the journal content to include articles on all types of cancer treatment—surgery, radiation therapy, and immunotherapy, as well as single and combined modality drug therapy.

The monthly journal, which has a circulation of approximately 6,000, has undergone other changes. Alternate issues now will report the proceedings of an important symposium on cancer treatment.

The editorial board of the journal has been expanded to nine, including specialists in surgery, radiotherapy, immunotherapy, and chemotherapy. In addition, the journal now has a 15-member editorial advisory board.

The editorial board of *Cancer Treatment Reports* has initiated a policy of rapid review and publication within 2 months of submission for manuscripts thought to be of particular clinical importance.



Dr. Chabner, who received his M.D. degree from Harvard in 1965, is the author of more than 70 publications on the pharmacology of anticancer agents, and on Hodgkin's disease, non-Hodgkin's lymphomas, and other malignancies.

## DRS Recognizes 4 Inventors; DHEW Holds Patents



Dr. Joe R. Held (l), DRS Director, presents plaques with replicas of the patents issued on the basis of their inventions to (l to r) Mr. Schuette, Mr. McCarthy, Mr. Boretos, and Dr. Goldstein. Dr. Robert L. Dedrick (r) is acting chief, BEIB.

Dr. Seth Goldstein, William Schuette, John Boretos, and Charles McCarthy of the Biomedical Engineering and Instrumentation Branch, Division of Research Services, were honored recently for their innovative contributions.

### Records During Surgery

Dr. Goldstein's "Electrode Insertion Device for Neuro-electric Recording" enables neurosurgeons and neurophysiologists to measure electrical activity of single cells in the cerebral cortex of a human during surgical procedures. (See *the NIH Record*, April 22, 1975, page 7.)

Numerous previous attempts proved unsuccessful because of the problem of keeping the recording microelectrode adjacent to the same cell over extended periods of time in the presence of tissue motion caused by blood pressure and respiration.

By overcoming this problem with a unique air bearing suspension system to support the microelectrode, the new instrument will contribute to the elucidation of the role of single brain cells in both normal and abnormal functions of the brain.

### Accuracy Enhanced

Electromagnetic flow meters, which are used extensively in biomedical research, are subject to a variety of mechanical and electro-mechanical artifacts which render this output unreliable. Mr. Schuette's patent, "Modulated Sine Wave Flowmeter," describes an ingenious device in which modulation of the magnet drive voltage at zero flow improves artifact rejection and thus enhances the accuracy of the information.

Mr. Boretos developed a "Device for Treating Subungual Hematoma" to relieve the pain caused by blood pooling beneath a smashed

finger or toe nail. The device consists of two components: a plastic guide attached to a conventional band-aid, and a fine steel plunger.

### Guides Puncture

The band-aid is applied to the injured nail, positioning the guide directly over the injured area, and the plunger is heated over a flame and advanced into the guide. Penetration can be performed conveniently, is precisely controlled, and provides instant relief.

Quantitative delivery and rapid uniform mixing of very small liquid samples pose a considerable problem in clinical chemistry where volumes may be limited. Mr. McCarthy, in collaboration with Harold Nishi of the Clinical Pathology Department of the Clinical Center, has solved the problem by performing both functions in a "Vibrating Pipette Probe Mixer."

### Microliters Mixed

The tip of the pipette which delivers the liquid may be vibrated by mechanical means or by a fluid oscillator, ensuring thorough mixing with as little as one microliter of added reagent.

All four United States patents are assigned to the Department of Health, Education, and Welfare.

## DRG Processes Record Number Of Applications for Support

The number of applications to the Public Health Service for research support, assigned and processed by the Referral Branch of the Division of Research Grants, in Fiscal Year 1976 exceeded the previous record year, FY 1975.

Competing (new and renewal) and non-competing (continuation) applications reached 32,222—up more than 9 percent from the previous year's total of 30,167.

Almost 79 percent of the research applications were assigned to NIH.

## Dr. Elwood Jensen Wins The French Prix Roussel For Steroid Research

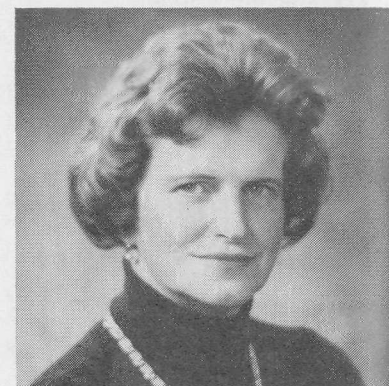
Dr. Elwood V. Jensen, who has received research support for a number of years from the National Cancer Institute and the National Institute of Child Health and Human Development, has been named co-winner of the French Prix Roussel for 1976.

Dr. Jensen is director of the Beckman Research Laboratory for Cancer Research in the University of Chicago's Division of the Biological Sciences and The Pritzker School of Medicine, and professor of biophysics and theoretical biology.

He shared the \$10,000 prize with Professor Etienne Baulieu of the University of Paris.

The Roussel Prize, which is given every 2 years for original research in the field of steroids, was awarded to Dr. Jensen at a ceremony in Paris on June 10 for his discovery of sex hormone receptors and elucidation of their role in the biochemical mechanisms of estrogenic hormone action.

He has also received numerous other awards.



Frances H. Pettinato has been appointed executive officer of the National Institute of Dental Research. Mrs. Pettinato has served as the Institute's financial manager (formerly budget officer) since 1958, and more recently as acting executive officer.

## Grants Associate Seminar Nominations Due Aug. 2

Scientists interested in the Seminar Series for Grants Associates (see *the NIH Record*, May 18, page 7) should forward their curriculum vita and a memo of justification through their immediate supervisor to their B/I/D Director as soon as possible.

Each Director should submit the names of no more than three nominees and their c.v.'s to A. Robert Polcari, Grants Associate Office, Westwood Bldg., Room 2A-03, by Aug. 2.

Dr. Thomas E. Malone, NIH Associate Director for Extramural Research and Training, will make the final selections.

**STOP SMOKING —  
SAVE ALVEOLI**